

## REMARKS

Favorable reconsideration and allowance of this application are requested.

### **1. Discussion of Claim Amendments**

A minor typographical error has been corrected in the specification on page 6 thereof.

Pending independent claim 1 has been revised so as to emphasize that the composition is comprised of an aromatic polycarbonate or a blend of such aromatic polycarbonate with polyester, in which the polycarbonate in the blend form a continuous phase. Support for such revision can be found at page 6, lines 6-9 of the specification. (*"The thermoplastic composition according to the invention may also comprise a blend of aromatic polycarbonate and polyester. In such blend...the polycarbonate... can be the major component; that is form a continuous phase or matrix."*)

In addition, the ration of the components (b1) to (b2) is now recited in claim 1 to be between 1/3 to 3/1 as supported by page 8, lines 4-7 of the originally filed specification. (*"Preferably, the mass ratio of components (b1) and (b2) is from ...1/3 to 3/1...."*) In view of this amendment to claim 1, prior pending claim 9 has been cancelled as redundant.

Pending claim 11 has been recast so as to recite an injecti~~on~~ molded article comprised of the composition of claim 1 so as to remove any potential issue with respect to its being originally cast as a "use" claim.

Therefore, upon entry of the present amendment, claims 1-8 and 10-13 will remain pending herein for consideration.<sup>1</sup>

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<sup>1</sup> Applicants note in this regard that the subject matter of the pending claims were recently issued in connection with the applicants corresponding European Patent EP-B-1492841.

## 2. Response to Substantive Rejections

### A. Rejections Based on Huang et al

The Examiner has advanced a rejection of prior claims 1-13 as "obvious" over Huang et al '021 (USP 5,717,021) and Huang et al '507 (EP 0 878 507). As will become evident from the discussion which follows, neither publication is appropriate as a reference against the present application.<sup>2</sup>

#### (i) Huang does not teach to use C<sub>6</sub>-C<sub>18</sub> alpha olefin oligomers

Huang et al does not disclose a composition comprising a saturated alpha-olefin oligomer of at least one C<sub>6</sub>-C<sub>18</sub> alpha-olefin. No disclosure whatsoever is given for C<sub>6</sub>-C<sub>18</sub> alpha olefin oligomers. It is noted in this respect that significant doubt can be raised whether a skilled person reading Huang et al would seriously contemplate to apply in the composition of Huang et al any alpha olefin oligomer other than a butene or butylene containing oligomer. In this regard, reference is made to column 4, lines 8-9 of Huang et al '021 which states:

*"The polybutene polymers contemplates (sic) in this invention are C<sub>4</sub> to C<sub>16</sub> polymers."* (emphasis added)

Moreover, at column 4, lines 38-42 of Huang et al '021, it is observed that:

*"The resulting C<sub>4</sub> to C<sub>16</sub> polymer typically includes various forms of butene, for example isobutene, 1-butene, trans-2-butene, cis-2-butene, and can contain a small amount of propene and minor amounts of polymerization byproducts."* (emphasis added)

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<sup>2</sup> Since the disclosures are very similar, for ease of reference, the publications will be collectively referred to hereinafter as "Huang et al".

And at column 4, lines 61-65, Huang et al note that:

*"Polybutene polymers are commercially available in a variety of grades ... Included within the present invention are polybutene polymers which are homopolymer, copolymer, unsaturated, hydrogenated and functionalized polymers".*  
(emphasis added)

Moreover, in all the examples of Huang, polybutene copolymer of isobutylene and butene is used.

**(ii) There is no synergetic effect observed in Huang**

The present invention clearly shows that addition of both component (b1) and (b2) gives an synergetic effect. Upon addition of solely a b1-component (see comparative Experiments A and E in the subject application), a high release force is observed (see Figure 1) and demoulding is troublesome. Employing only a b2-component (see comparative Experiments B, C and D in the subject application) gives similar results. When combining components b1 and b2 (see Examples 1 and 2) lower average release forces are observed, as well as problem-free processing. This experimental evidence clearly exemplifies the synergetic effect of applying both a b1 and a b2-component. This is nowhere mentioned, nor suggested in Huang et al. In addition, there is no contemplation in Huang et al that a person skilled in the art would find any reasonable expectation of success to combine components b1 and b2 in the claimed ratio of 1/3 to 3/1.

**(iii) The Examples of Huang lie outside the range of 1/3 to 3/1**

In all Examples where a combination of PETS and polybutene is used (see Examples 9-13 Table II in column 7 of Huang et al '021) the ratio of PETS over polybutene lies outside the range of 1/3 to 3/1. A person skilled in the art would

therefore not be directed to all elements of the present claims, as the ratio employed by Huang et al lies outside the claimed range of present claim 1.

The presently pending claims are therefore patentably unobvious over either Huang et al '021 or Huang et al '507

**B. Rejection Based on Miller et al in combination with Mercx and Huang et al '021**

The Examiner also asserts that the present application is obvious under 35 USC §103(a) over Miller et al (EP0230015 or its US equivalent USP 4,626,556 as disclosed in the subject application on page 1, lines 12-18 and on page 1, lines 32 through page 2, line 1) in view of Mercx (US 2003/0096122) and Huang et al '021. Applicant respectfully submits that the present invention is non-obvious over such applied references.

As has been acknowledged in the present application, both fatty acid esters of aliphatic polyols (component b1 in the present application) as well as saturated alpha-olefin oligomers (component b2 in the present application) are known generally as release agents per se (also see comment about such individual art knowledge in the present application at page 2, lines 19-23). This fact is evidenced from the applied references of record.

Specifically, Mercx employs pentaerythritol tetrastearate (PETS) in the comparative experiments (see Examples A, B and C on page 3 of Mercx). PETS is a fatty acid ester of aliphatic polyol (component b1 in the present application). Mercx employs polyethylene or a combination of polyethylene and polyethylene ethyl acrylate in all other examples (see Table 1 and 2 on page 3 of Mercx). Miller also employs PETS in the control experiment (see Table 1, Control 1 on page 5 and Control 10 on page 7 of Miller) and in the Examples a synthetic mineral oil (see Table 1, page 5 of Miller) which is a saturated alpha olefin oligomer (see page 3, line 21 of Miller).

However, neither Mercx, nor Miller suggest to employ *both* components in one composition, let alone in the ratio as given in present claim 1, i.e. between 1/3 to 3/1. A person skilled in the art would therefore have no incentive to try using both components as mould release agent, as there is no reasonable expectation for success for obtaining the synergetic effect and even if he would try, he would not come to all elements of the present claim, as nowhere in the prior art a ratio of b1 over b2 between 1/3 to 3/1 is mentioned or suggested.

Applicant therefore respectfully submits that the amended claims are non-obvious over all applied references of record. Withdrawal of the rejection advanced under 35 USC §103(a) is therefore in order.

### **3. Fee Authorization**

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

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